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# Assessing Nutrition Knowledge, Skill and Attitudes in Adolescent Girls

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School of Population Health

July 2011

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# Outline

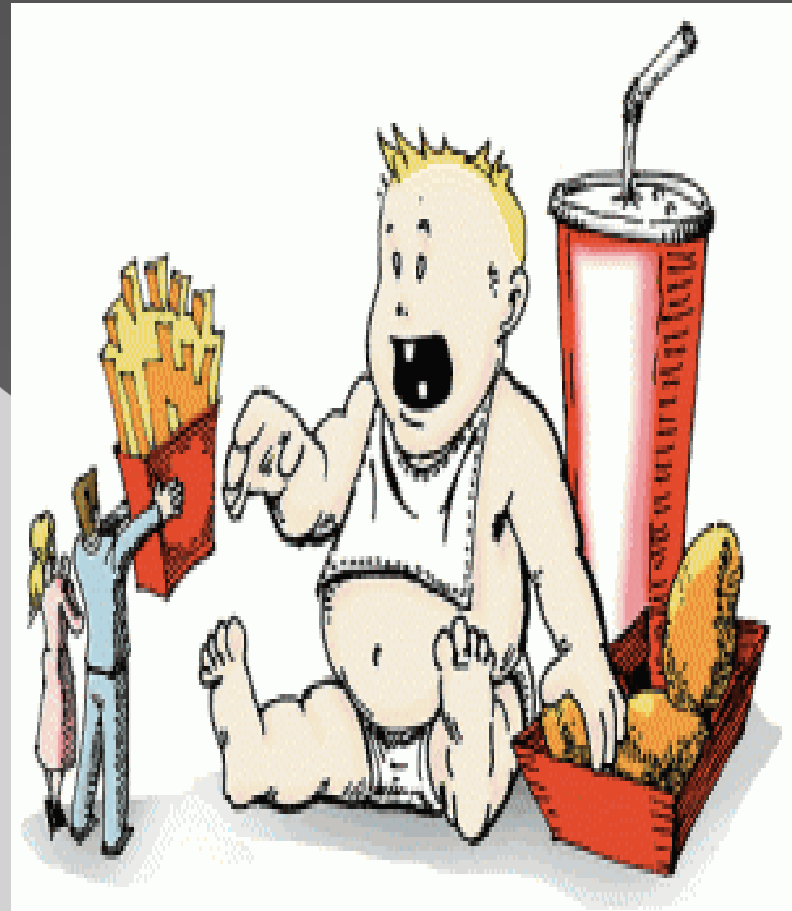
- ◉ The Problem: Childhood Obesity
- ◉ Girls Incorporated
- ◉ Literature Review
- ◉ Research Questions
- ◉ Methods
- ◉ Results
- ◉ Process Evaluation
- ◉ Questions
- ◉ References

# The Problem: Childhood Obesity

- ◉ 1 in 3 children in America are overweight or obese
- ◉ 40% of African American and Latino children are overweight or obese
- ◉ \$14 billion per year in direct health care costs
- ◉ \$117 billion per year in direct medical expenses and indirect costs
- ◉ Great disparities in access to healthy food
- ◉ Serious consequences

# Childhood Obesity Epidemic in Philadelphia

- 30.5% of 13-17 year old are overweight or obese
- 46.7% Black, 50.1% Latino compared to 30.7% White children are overweight or obese



# Unhealthy Dietary Behaviors

- ◉ 82% ate fruits and vegetables less than five times per day
- ◉ 75% ate fruit or drank 100% fruit juices less than two times per day
- ◉ 89% ate vegetables less than three times per day
- ◉ 28% drank a can, bottle, or glass of soda or pop at least one time per day

# Physical Inactivity

- 57% did not attend physical education classes in an average week when they were in school.
- 75% did not attend PE classes daily when they were in school.
- 53% watched television 3 or more hours per day on an average school day.
- 35% used computers 3 or more hours per day on an average school day.

# Nutrition

- ◉ Adolescence time when individuals begin establishing own eating patterns
- ◉ Beginning poor eating habits
- ◉ Several Barriers





# Body Image

- ◉ Awareness of body shape and weight is common for adolescent girls
- ◉ What is “normal” dictated by several factors
- ◉ Cultures differ in what is considered desirable
- ◉ Desire to obtain the “perfect” body
- ◉ Development of Eating Disorders



# Research Questions

How does perception of  
body image relate to the  
nutrition habits of  
adolescent African  
American  
girls?

# Aims

- Assess changes in knowledge, attitudes and behaviors related to dietary practices of girls participating in the nutrition education program.
- Increase their knowledge and skill in making better eating choices
- Assess participant satisfaction with the program and its components

# Recruitment: Girls Incorporated



- Nonprofit sustained by public support
- Philadelphia and Southern NJ Chapter
- Inspires all girls to be strong, smart and bold<sup>SM</sup>
- Became national service in 1945
- Offer girls research based education programs that foster academic and life skills

# Participants

- ◉ Convenience sample from local High School
- ◉ Enrolled in Girls Incorporated Program
- ◉ N=25
- ◉ African American 76%
- ◉ Latino 16%
- ◉ Mixed 8%

# Methods

- ◉ Pre and Post Test
- ◉ Focus Groups
- ◉ Different topic covered each week

Session 1: Nutrition Basics

Session 2: Food Labeling

Session 3: Nutrition and You

Session 4: Nutrition and You (continued)

Session 5: Wrap up

- ◉ Sessions audiotaped, transcribed and triangulated, content analysis
- ◉ Process Evaluation

# Health Knowledge

| Question  | Pre                  | Post                 |
|---|----------------------|----------------------|
| How many food groups are there?   | 44% correctly answer | n/a                  |
| What is the healthiest type of fat  | 16% correctly answer | 72% correctly answer |
| If you eat more calories than you burn off by being active, you gain weight | 56% correctly answer | n/a                  |
| How many servings of fruit should you have daily?                           | 36% correctly answer | 56% correctly answer |

# Health Practices

| Behavior                              | Pre Test Results                    | YRBSS Results               |
|---------------------------------------|-------------------------------------|-----------------------------|
| Consuming fruits and vegetables daily | 56% consume at least one daily      | 82% less than 5 times a day |
| Milk consumption                      | 32% do not drink milk at all.       | n/a                         |
| Screen Time on a weekday              | 52% 3 hours or more                 | 53% 3 hours or more         |
| Being active during the week          | 60% spent 30 minutes to an hour     | n/a                         |
| Being active on the weekend           | 56% less than 30 minutes to an hour | n/a                         |



# Body Image

| Body Type  | Perceived | Actual |
|------------|-----------|--------|
| Normal     | 44%       | 16%    |
| Overweight | 48%       | 56%    |
| Obese      | 2%        | 28%    |

# Themes

- ◉ Barriers to Healthy Eating
- ◉ Healthy Eating Enabling Factors
- ◉ Influences on Body Image and Self Esteem
- ◉ Strategies for Change



# Barriers to Healthy Eating

# Not common practice at home

- *“I think it’s just because I was never raised to care about what is on a food label it was always well if you want to eat something eat it. As long as it doesn’t make you sick why should what’s on the label matter.”*

# Invincibility

- “ I agree I’m diabetic and I’m supposed to watch what I eat but I don’t. I know that it’s a stupid thing to do but I just don’t think it’s something that I should have to worry about at such a young age. I feel like that’s what older people should do worry about what they eat.”
- “I don’t think that I have the worst eating habits in the world and I’m healthy so if it ain’t broke why fix it?”

# Lack of interest

- ◉ *“I don’t think that many teens do to be honest. Like me I just don’t think they care regardless of what the label says you want what you want”*
- ◉ *“I don’t know maybe because I’m just lazy or I don’t really care to stop and read them they just don’t matter to me”*

# Lack of Knowledge

- *“I think that before this program it was a little harder because I couldn’t understand what was on a label so knowing what is good and bad was a little difficult. Like everybody knows that fruits and vegetables are good for you but what about knowing if something has too much salt or fat it’s a lot to think about and know.”*
- *“You know as dumb as this is about to sound I never really thought about drinks having calories. I don’t know why. I think that now that I know what all those numbers mean on the food label I might change the way I eat a little bit.”*

# Limited Choice

- ◉ *“When I am at home I have to eat what’s there because according to my mom when I am able to contribute to the house I can buy what I want.”*
- ◉ *“You would think at school they would try and help us out with that but you see what we eat for lunch- burgers, fries, a lot of kids don’t have the money to go off campus and get something better even if they wanted to.”*
- ◉ *“I think that if could try to I would just need help. Like here at school if they would give us more healthy food to pick from it would make it easier.”*



# Time/Convenience

- *"I think that eating healthy takes up a lot of time. Because like we said last week you have to be careful of the calories you eat and make sure you are not having too much fat and it just becomes a chore so I would say for me I work after school and on the weekends its hard."*
- *"I'm always busy if I am not here at school I am work or volunteering so I usually get something I can eat on the bus."*
- *" If I wasn't so busy I think I would be able to concentrate on eating healthy I just have too much going on to focus on that right now"*

# Advertisements

- “ I think that if they stopped pushing junk food to us like on TV and stuff that would help. Like when I’m watching 106 and all of a sudden they got a McDonald’s commercial on with some contest on how I can win this or that. That stuff stays in your mind”



# Appeal

- *“They should try and find a way to make eating healthy easier for us here. Like making it look like something I want to eat and not something that my dog threw up.”*

# Cost

- ◉ *"I think it's a lot harder to eat healthy outside [the home] because things just be so expensive. The cheap stuff is always the crap they say we shouldn't be eating anyway so it's like what you want us to do? It's either eat what we can afford or not eat at all. I'd rather eat."*
- ◉ *"You ever notice how when you go to a restaurant the healthy stuff is more expensive and they give you less food too. Why would I want to waste my money like that just disrespectful I came to eat!"*
- ◉ *"My mom actually stopped buying a lot of fruits and vegetables because she said they go bad too quickly and it's throwing away money"*
- ◉ *"I think the obvious thing is making it more affordable. There is no reason why I should have to pay \$8 for a salad when chicken nuggets are only \$1. I think until those changes I will not be eating healthy when I'm out."*

# Taste

- ◉ *“I think that eating fried vegetables or stewed vegetables has just spoiled me I would never eat a vegetable without some real flavor. I really think that’s a problem for a lot of people. Eating right is just gross!”*
- ◉ *“I usually pick whatever tastes the best and won’t hurt my wallet too much. That’s usually like an Arizona and a bag of chips.”*
- ◉ *“Like the only time we have a vegetable is maybe when grandma makes some [collard] greens. I love my grandma greens so good with the seasonings and the ham hock so good! I know it’s not good but that’s really the only time I will have a vegetable on my plate.”*
- ◉ *“I wish there was a way to make healthy things taste better. Maybe if healthy food didn’t taste like cardboard I wouldn’t mind.”*



# Healthy Eating Enabling Factors

# Family meals and prep

- *“I think that helping my parents make dinner once a week helps us at least try to eat healthy. Usually on Sundays we have a family dinner and mom usually makes a salad as one of the things to eat. It’s a rule that you have to at least try everything on the table. Even if I didn’t want it I don’t really have a choice.”*



# Influences on Body Image/Self Esteem



# Clothing Styles and Fit



- ◉ *"I would say for me like when I shop with my friends it's hard because sometimes I can't always fit into the same clothes everybody else is wearing because I'm a little bit bigger than everybody else. It doesn't make me feel sad it's just frustrating sometimes. I love my curves though I feel like that is one of the things that makes a black or Latina woman special."*
- ◉ *"You know how sometimes girlfriends share clothes? If something doesn't fit me it sometimes makes me think maybe I am a little bit too big"*
- ◉ *"Even our clothes tell us to have some shape like Baby Phat and Applebottoms."*

# Pleasing Boys

- *“I just think that guys of color are checking for the girls that are thicker than a snicker one of my guy friends told me that they reason they like shapely girls was because they didn’t want to be with someone who looked liked a boy. I think that is ridiculous, but I could see how that could upset somebody and make them want to eat a lot or develop an eating disorder.”*
- *“I think that a lot of guys our age are looking at the video girls and wanting us to look the same and how can I compete with Buffy the Body or Melyssa Ford. Those girls are pretty but also a lot of the stuff they got aint real but guys don’t understand that. So I don’t pay them any mind.”*

# Comparison to peers

- ◉ *"I agree I compare myself to my peers sometimes or like she said before when the guys are talking about the girls they think are cute I look at what they got and what I have but at the end of the day I am happy with me shoot I know I'm bad!"*
- ◉ *"I think every teenage girl has body image issues. Like who doesn't look at their friends and say I wish I had their hair or their eyes or their boobs. My friends and I have contests sometimes about who has the biggest butt. I don't know I just feel like that's natural"*
- ◉ *"I think they do sometimes I find myself comparing myself to my friends like am I too fat or too skinny but I try not to let it get to me because I know everybody is different."*

# Media and Celebrity Influences

- ◉ *"I really think that's why I tend to read more of the black magazines and watch the black shows on TV because they show me that it's ok to look the way I look I don't need to be a toothpick to be pretty."*
- ◉ *"I kind of agree I think it's important to have someone in the media that you can relate to. Just makes it feel like you are ok too."*
- ◉ *"I love to see celebrities who look like me and just make me feel better about my body like LisaRaye and Alicia those are successful black women with bangin bodies but to some people they look fat and I think that it's great that they rep for the curvy girls."*

# Media and Celebrity Influences

- ◉ “Let’s face it, women of color for the most part have curves. I remember watching the red carpet one time and they were talking about Jennifer Hudson, she’s beautiful. This was after Dream Girls and they kept talking about how she needed to lose a little weight and the girl looked gorgeous. I know that everybody has their own reasons for losing weight but I feel like all that talk probably played a big role in her losing all this weight. She’s still beautiful I just think now she is sending a message that being big isn’t beautiful anymore. I say accept your curves.”
- ◉ “Like I feel that a white girl sees Fergie and says wow she is gorgeous I want to have her butt or her abs or something but a black girl will look at her and say oh her hair style is cute or her makeup is cute. Like we want to copy the look not the body.”

# Being your own person

- *“I think that people just need to be happier within themselves stop trying to be somebody else and you won’t have these problems.”*
- *“I don’t think it’s ethical you are what you are, the way you are inside should be portrayed outside too. I think if you are ashamed of yourself or insecure its going to show no matter what you do to fix yourself up.”*
- *“Everyone is beautiful and you have to be able to see that within yourself.”*

# Cultural Preferences

- ◉ *“Well you know different cultures have different ideas of what is beautiful. Being a woman of color beauty is a female with a fuller figure a woman with a coca cola bottle[shape].”*
- ◉ *“I think that is true but at the same time I feel like slowly people are starting to try to be what white people believe to be beautiful and that is skinny with long hair.”*



# Strategies for Change



# Theories

## ● Health Belief Model

- > **Perceived Susceptibility**
- > Perceived Barriers
- > Self Efficacy
- > Benefits

## ● Theory of Planned Behavior

- > Behavioral Beliefs
- > Normative Beliefs
- > Control Beliefs

# Family

- ◉ *"I don't think my friends influence me at all I think that my family has more of an influence. Because I mean friends come and go but I feel like I am closer to my family so if someone makes a comment about the way I look it tends to affect me more. In the end though I feel in their own way they are just trying to look out for me and not trying to be mean."*
- ◉ *"Sometimes parents might say oh well you need to lose weight or you're a little fat or too skinny it would make you feel bad inside. My family's opinion matters to me a lot so when they talk about my weight or my figure I really take it to heart. I mean it's your family they're supposed to tell you the truth."*
- ◉ *"I think that my family makes me feel good about the way I look. The women in family are curvy and I think that if ever tried to lose weight and I would never do that they would tease me. Like why would I want to be smaller. some of that back. That kind of bothers me a little bit."*

# Raising Awareness

- ◉ *“I think that we should talk about it more especially in the black community because like we just said a lot of people think it doesn’t happen to us.”*
- ◉ *“Maybe if it started with people we see in the media slowly losing weight? Or maybe if there was a way to lose weight be healthy and not lose those curves.”*

# Linking body image to health

- *“I’m not sure I think that something drastic would have to happen. I think that the biggest problem is that people are not linking body image to health. It’s like we were saying last time body image is linked more to self esteem.”*
- *“I think it is just really hard to put the two together because if you don’t look sick or feel sick you don’t think that there is anything wrong”*

# Positive People=Positive Body Image

- ◉ *“Surround yourself with positive people”*
- ◉ *“Talk to people that you trust and make you feel good about yourself”*



# Process Evaluation

- ◉ Where are the gaps between program design and delivery
  - > Insufficient structure to each lesson
  - > Need to link body image to health and nutrition
  - > Better way to engage participants
- ◉ Lessons Learned
  - > Should have planned project out more carefully
  - > Better timing
  - > Tailored activities to reinforce lessons

# Recommendations

- ◉ Create a program that will
  - > address healthy practices
  - > link food and disease
  - > link body image with health
  - > help provide/maintain good self esteem
  - > encourage adolescents to continue talks about these issues
  - > Incorporate families and the community
  - > provide healthy role models for adolescents to emulate

# Questions





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